



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/051,565 06/08/98 SELDESLACHTS

D 98227

EXAMINER

IM22/0605

BACHMAN & LAPOINTE
900 CHAPEL STREET
SUITE 1201
NEW HAVEN CT 06510-2802

SHERRER, C

ART UNIT

PAPER NUMBER

1761

DATE MAILED:

06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

BEST AVAILABLE COPY

Office Action Summary

Application No.
09/051,565

Applicant(s)
Seldeslachts

Examiner
Curtis E. Sherrer

Art Unit
1761



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Mar 20, 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28, 32, 33, 35-48, 50, and 53-65 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28, 32, 33, 35-48, 50, and 53-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirements.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 19) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 20) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

Art Unit: 1761

Part III DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 04/06/00 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. Again, the original disclosure does not support the showing of where the distribution balls are located in the disclosed apparatus.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bottom plate containing orifices whose total surface area is at least 90% of a transverse surface area of the column must be shown or the feature(s) canceled from the claim(s). The figures also do not include the cleaning means. No new matter should be entered.
3. Neither Figure 2 or 3 show this amount of orifices.

Specification

4. The amendment filed 04/06/00 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Again, applicant has amended the drawings and written

Art Unit: 1761

disclosure to show where the distribution balls are located in the disclosed apparatus without providing any basis for such amending.

Applicant is required to cancel the new matter in the reply to this Office action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 28, 32, 33, 35-48, 50, and 53-65 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

7. The specification states that “to prevent the formation of foam that could compromise the efficiency of the device” the distances between the various components must be regulated. (Page 10, last paragraph). There is no basis found in the instant specification to relate the sizing of the orifices to the minimization of foaming as claimed.

8. Claims 28, 32, 33, 35-48, 50 and 53-65 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

9. Applicant claims an area of at least 90% (which inherently includes up to 100%) and the specification does not enable those in the art what bottom plate construction could allow for about 100% of the plate area to be orifices, i.e., open area. If the orifices are located on the corrugations to obtain such surface area, then the independent claims should be narrowed to include this limitation.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 28, 32, 33, 35-48, 50 and 53-65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 28 is indefinite because there is no antecedent basis for the phrase "the pressure in the column."

13. Again, the scope of the phrases "substantially prevent foaming," or "significant formation of foam" and "substantially perpendicular" (Claims 28 and 57), and "substantially all of the cross-section" (Claim 37) are unknown. Applicant asserts that the scope of said phrases are readily understood by those of ordinary skill in the art, for example, "substantially preventing foaming" means that "not all foam is prevented." The question arises, how much is "not all"? The statute

requires that the claims must distinctly claim the subject matter. The use of said phrases lack distinctness, i.e., scope.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leva (U.S. Pat. No. 3,933,953) in view of McNulty et al (U.S. Pat. No. 5,645,953) in further view of Chuang (U.S. Pat. No. 5,387,377) and in further view of Hardwick (Handbook of Brewing, pp. 294-99) an in further view of Lee et al (U.S. Pat. No. 5,106,544).

16. The cited art teaches that cited above but do not disclose a distribution means comprised of secondary pipes with orifices. While this limitation is considered to be notoriously well known in the gas/liquid contact arts, Lee et al teaches that the prior art relies on a distributor that can be seen to comprise a main pipe and secondary pipe that inherently have orifices for distributing liquid. It would have been obvious to those of ordinary skill in the art to use the distribution means of Lee et al in the process means as disclosed by the cited art above as it is a well known distribution means.

Art Unit: 1761

17. Claims 28, 32, 33, 35-48, 50, and 53-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admissions in view of Kruger et al (U.S. Pat. No. 4,550,029) in further view of Perry's Chemical Engineering Handbook (pages 18-19 to 18-37, hereinafter "Perry").

18. Applicant admits (page 1) the well known processing of beer wort to remove unwanted volatile flavors. Applicant does not disclose the specifically claimed apparatus is old.

19. Kruger et al teach the injection of steam/inert gas into a wort "to degas and free the wort from undesirable foreign substances" (Abstract) and additionally saves energy. (Col. 1, line 56 to col. 2, line 19). An apparatus is associated with said boiling (Fig. 1) whereby the wort is sprayed in at the top while the steam/inert gas is injected into the bottom.

20. Perry teaches that which is common knowledge concerning packed columns. Specifically, it discloses a schematic of a packed column (Fig. 18-33), general knowledge about support plates, including corrugations with orifices, (pp. 18-25 to 18-270 and Figs. 18-46 to 18-48) whereby with "countercurrent type of support plate the free area for gas flow can range up to 90 percent of the column cross-sectional area," and general knowledge about liquid distribution (pp. 18-27 to 18-32 and Fig. 18-51).

21. It would have been obvious to those of ordinary skill in the art to perform the prior art process of the admitted prior art or Kruger et al in apparatus as taught Perry because said means are commonly used for separation processes such as that taught by the prior art.

Art Unit: 1761

22. As previously asserted, dependent claims drawn to the use of well known valves to control the process feeds is notoriously well known.

Response to Arguments

23. Applicant's arguments filed 03/20/01 have been fully considered but they are not persuasive. See above.

Further, Applicant argues that there is no showing of main and secondary pipes with orifices as claimed in Claims 37 and now 53. First, it is noted that Claim 37 has no language directed to secondary pipes. Nevertheless, Applicant's attention is directed to Chuang et al who shows main pipes containing multiple orifices. Lastly, specifically, Applicant argues that there is no showing of an inclined surface and baffle as claimed in Claim 40. McNulty et al clearly show this feature (see Fig. 2).

Conclusion

24. No claim is allowed.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Sherrer whose telephone number is (703) 308-3847. The examiner can normally be reached on Tuesday through Friday from 6:30 to 4:30. The **fax phone number** for this Group is (703)-305-3602.

Serial Number: 09/051,565

8

Art Unit: 1761

26. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'C. E. Sherrer', with a long horizontal flourish extending to the right.

Curtis E. Sherrer
Primary Examiner
June 1, 2001